

**AMENDMENTS TO THE CLAIMS**

This listing of claims will replace all prior versions, and listings, of claims in the application:

**LISTING OF CLAIMS**

1. (Previously Presented) A method comprising:  
receiving a plurality of constituting elements of a data structure;  
determining occurrence frequency of each unique constituting element in said data structure;  
assigning a cookie representation to each of said unique constituting elements based at least in part on the occurrence frequencies of said unique constituting elements;  
transmitting a list of said unique constituting elements in the order of their occurrence frequencies to allow a receiver of said list of said unique constituting elements to infer the corresponding cookie representations of the unique constituting elements; and  
transmitting said data structure in a representative form encoded with said cookie representations.
2. (Original) The method of claim 1, wherein said determining and assigning comprises assigning an initial cookie representation to each unique constituting element as the constituting elements are received, and tracking occurrence frequencies of the unique constituting elements, and upon receipt of all constituting elements of the data structure, re-assigning a final cookie representation for each of the unique constituting elements based on the occurrence frequencies of the unique constituting elements.
3. (Original) The method of claim 2, wherein the method further comprises ordering said unique constituting elements based on their occurrence frequencies.
4. (Original) The method of claim 2, wherein the method further comprises storing said constituting elements of the data structure as they are received, using said initial cookie

representations, and subsequently replacing the stored initial cookie representations with the final cookie representations, and said transmitting comprises transmitting said constituting elements of said data structure using said final cookie representations.

5. (Previously Cancelled).

6. (Original) The method of claim 1, wherein the cookie representations are numeric in form, with the cookie representations of the 128 most frequently occurred unique constituting elements having a size of one byte each, and the cookie representations of the next 32,640 most frequently occurred unique constituting elements having a size of two bytes each.

7. (Original) The method of claim 1, wherein said data structure is an XML data structure, and said constituting elements comprise tag names, attribute names and attribute values.

8. (Currently Amended) A method comprising:  
receiving a plurality of unique constituting elements of a data structure transmitted in a pre-determined order;  
inferring a plurality of corresponding cookie representations for the received unique constituting elements in accordance with their manner of transmissions under the pre-determined ~~manner~~ order of transmission; and  
receiving the constituting elements of the data structure in a representative form encoded with cookie representations.

9. (Previously Cancelled).

10. (Currently Amended) The method of claim 9 ~~8~~, wherein said inferring comprises inferring a unique one-byte numeric representation for each of the first 128 unique constituting elements transmitted, and a unique two-bytes representation for each of the next 32,460 unique constituting elements transmitted.

11. (Original) The method of claim 8, wherein the method further comprises reconstituting the constituting elements of the data structure, received in said representative form, based on the inferred cookie representations.
12. (Original) The method of claim 8, wherein said data structure is an XML data structure, and said constituting elements comprises tag names, attribute names and attribute values.
13. (Previously Presented) An apparatus comprising:  
storage medium having stored therein a plurality of programming instructions  
designed to receive a plurality of constituting elements of a data structure,  
determine occurrence frequency of each unique constituting element in said  
data structure, assign a cookie representation to each of said unique  
constituting elements based at least in part on the occurrence frequencies of  
said unique constituting elements, transmit a list of said unique constituting  
elements in the order of their occurrence frequencies to allow a receiving of  
said list of said unique constituting elements to infer the corresponding cookie  
representations of the unique constituting elements, and transmit said data  
structure in a representative form encoded with said cookie representations;  
and  
at least one processor coupled to the storage medium to execute the programming  
instructions.
14. (Original) The apparatus of claim 13, wherein said programming instructions are  
designed to perform said determining and assigning by assigning an initial cookie  
representation to each unique constituting element as the constituting elements are received,  
and tracking occurrence frequencies of the unique constituting elements, and upon receipt of  
all constituting elements of the data structure, re-assigning a final cookie representation for

each of the unique constituting elements based on the occurrence frequencies of the unique constituting elements.

15. (Original) The apparatus of claim 14, wherein the programming instructions are further designed to order said unique constituting elements based on their occurrence frequencies.

16. (Original) The apparatus of claim 14, wherein the programming instructions are further designed to store said constituting elements of the data structure as they are received, using said initial cookie representations, and subsequently replace the stored initial cookie representations with the final cookie representations, and said programming instructions perform said transmitting by transmitting said constituting elements of said data structure using said final cookie representations.

17. (Previously Cancelled).

18. (Original) The apparatus of claim 13, wherein the programming instructions are designed to employ cookie representations in numeric form, with the cookie representations of the 128 most frequently occurred unique constituting elements having a size of one byte each, and the cookie representations of the next 32,640 most frequently occurred unique constituting elements having a size of two bytes each.

19. (Original) The apparatus of claim 13, wherein said programming instructions are designed to perform said receive, determine, assign and transmit for an XML data structure, said constituting elements comprising tag names, attribute names and attribute values.

20. (Original) The apparatus of claim 13, wherein said apparatus is a selected one of a wireless mobile phone, a palm sized personal digital assistant, a notebook sized computer, a desktop computer, a set top box and a server.

21. (Previously Presented) An apparatus comprising:  
storage medium having stored therein a plurality of programming instructions  
designed to receive a plurality of unique constituting elements of a data  
structure transmitted in a pre-determined order, to infer a plurality of  
corresponding cookie representations for the received unique constituting  
elements, and to receive the constituting elements of the data structure in a  
representative form encoded with cookie representations; and  
at least one processor coupled to the storage medium to execute the programming  
instructions.
22. (Previously Cancelled).
23. (Previously Presented) The apparatus of claim 21, wherein said programming  
instructions are designed to infer a unique one-byte numeric representation for each of the  
first 128 unique constituting elements transmitted, and a unique two-bytes representation for  
each of the next 32,460 unique constituting elements transmitted.
24. (Original) The apparatus of claim 21, wherein said programming instructions are  
further designed to reconstitute the constituting elements of the data structure, received in  
said representative form, based on the inferred cookie representations.
25. (Original) The apparatus of claim 21, wherein said programming instructions are  
designed to perform said receive, infer, receive, and re-constitute for a XML data structure,  
said constituting elements comprising tag names, attribute names and attribute values.
26. (Original) The apparatus of claim 21, wherein said apparatus is a selected one of a  
wireless mobile phone, a palm sized personal digital assistant, a notebook sized computer, a  
desktop computer, a set top box and a server.